

CLAIMS

What is claimed is:

1. A method of reading special track-related information on an optical storage medium, said optical storage medium having at least one session comprising a
5 lead-in area and at least one data track, said method comprising:

moving a pickup head for reading special track-related information in a target session;

first reading TOC (Table of Content) data of said lead-in area in said target session, and then sequentially reading said data tracks in said target session
10 for reading said special track-related information; and

only when finishing reading all of said data tracks in said target session, then moving said pickup head to the next session for continuing on reading special track-related information.
2. The method of claim 1, wherein said sessions are sequentially coded with
15 corresponding serial numbers, and said target session is the first session on said optical storage medium.
3. The method of claim 1, wherein said pickup head sequentially reads said sessions, till all of the sessions on said optical storage medium are read.
4. The method of claim 1, wherein said pickup head is accommodated in an optical
20 storage device, and when said optical storage medium is placed into said optical storage device, said optical storage device performs said method to execute initialization of said optical storage medium to acknowledge data distribution on said optical storage medium.
5. The method of claim 1, wherein when said pickup head reads TOC data of said
25 lead-in area and finds a non-data track, said pickup head skips reading in the non-data track, and continues on to the next data track.

6. The method of claim 5, wherein said non-data track is an audio track.
7. The method of claim 1, wherein said special track-related information comprises information of data tracks relating to Data Mode/Form, Packet Type including Fixed Packet Type and Variable Packet Type, Packet Size, and Next Writable Address (NWA).
8. The method of claim 1, wherein said optical storage medium further comprises a Program Memory Area (PMA) for recording information relating to serial numbers, starting addresses, ending addresses and attributes of tracks which have been recorded on said optical storage medium.
9. The method of claim 8, wherein when said pickup head reads said session which is found to be an un-closed session, said pickup head does not read said lead-in area of said un-closed session, but reads information recorded in the PMA to perform further judgment, and wherein when any data track is found in said un-closed session, said pickup head jumps directly to said un-closed session to sequentially read said data tracks for reading said special track-related information.
10. The method of claim 9, wherein the PMA of said optical storage medium is read when said optical storage medium is placed into said optical storage device, and further recorded in system memories of said optical storage device.
11. A optical device for reading special track-related information on an optical storage medium, said optical storage medium having at least one session comprising a lead-in area and at least one data track, said optical device comprising:
- a pickup head, for reading special track-related information on said optical storage medium; and
 - a controller, for controlling and moving said pickup head for reading said special track-related information in a target session;

- wherein when reading in said target session, said pickup head first reads TOC (Table of Content) data of said lead-in area in said target session, and then sequentially reads said data tracks in said target session for reading said special track-related information; and wherein only when finishing reading all of said data tracks in said target session, said pickup head is then moved to the next session for continuing on reading special track-related information.
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12. The optical device of claim 11, wherein said sessions are sequentially coded with corresponding serial numbers, and said target session is the first session on said optical storage device.
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13. The optical device of claim 11, wherein said pickup head sequentially reads said session, till all of the sessions on said optical storage medium are read.
14. The optical device of claim 11, wherein when said optical storage medium is placed into said optical storage device, said optical storage device will perform initialization of said optical storage medium to acknowledge data distribution on said optical storage medium.
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15. The optical device of claim 11, wherein when said pickup head reads TOC data of said lead-in area and finds a non-data track, said pickup skips reading in the non-data track, and continues for reading the next data track.
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16. The optical device of claim 15, wherein said non-data track is an audio track.
17. The optical device of claim 11, wherein said special track-related information comprises information of data tracks relating to Data Mode/Form, Packet Type including Fixed Packet Type and variable Packet Type, Packet Size, and Next Writable Address (NWA).
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18. The optical device of claim 11, wherein said optical storage medium further

comprise a PMA for recording information relating to serial numbers, starting addresses, ending addresses and attributes of tracks which have been recorded in said optical medium.

- 5 19. The optical device of claim 18, wherein when said pickup head reads said session which is found to be an un-closed session, said pickup head does not read said lead-in area of said un-closed session, but reads information recorded in the PMA to perform further judgment, and wherein when any data track is found in said un-closed session, said pickup head jumps directly to said un-closed session to sequentially read said data tracks for reading said special track-related
- 10 information.
20. The optical device of claim 19, wherein said Program Memory Area (PMA) of said optical storage medium is read and recorded in system memories, when said optical storage medium is placed into said optical storage device.

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